5



AN INTERPOLATOR, A RESAMPLER EMPLOYING THE INTERPOLATOR AND METHOD OF INTERPOLATING A SIGNAL ASSOCIATED THEREWITH

ABSTRACT OF THE DISCLOSURE

An interpolator, method of interpolating a one-bit signal and resampler employing the interpolator and method. The interpolator employs a cascaded architecture to interpolate a one-bit input signal received at an input thereof. In one embodiment, the interpolator includes a multiple order interpolation filter that generates a sample range from at least three input samples associated with the one-bit input signal. The interpolator further includes a linear interpolation filter, associated with the multiple order interpolation filter, that develops a plurality of samples within the sample range.